

REMARKS

Claims 17-30 and 41-43 remain in the application. Claims 1-16 and 31-40 have been withdrawn from consideration without prejudice to further prosecution. Claims 17, 18, 19, 26 and 27 have been amended. Claims 41-43 have been added.

Applicant believes the claims as amended add new matter. A few details in regards to support for the amendments are provided as follows. These excerpts from the specification are provided for the convenience of the Examiner and are not necessarily the only location where support for the amendments is found in the specification.

In regards to **configuring the communication device**, on page 23 first paragraph of the specification, it states, "The processor 516 may obtain configuration information for each port from data stored in the EEPROM 522. In another embodiment, the processor board may obtain port configuration information from a boot server (see FIG. 3) located outside of the gaming machine."

In regards to the **physical communication protocol** for each port as well as a **mapping** on page 22 of the specification, last paragraph, it states, "As described with reference to FIG. 3, each communication port 506 may be configured for a particular physical communication protocol that allows messages to be communicated in a particular application protocol. For instance, when a particular game service interface utilizes an asynchronous serial physical communication protocol, a processor 516 may configure a port on the multi-port communication board 514 to accept a certain baud rate, number of stop bits, number of stop bits and type of parity (e.g. none, odd, even and wake-up) which allow the communication multiplexer device 304 to receive communications from the gaming machine in a native communication protocol. In addition, the port may be provided a port number and host IP number which allows a game service server or some other device located outside of the gaming machine to address messages to a particular port on the communication multiplexer device 304. As another example, a port may be configured by the processor 516 to use a synchronous serial physical communication protocol. In this case, the bit rate, protocol type, Host IP address, CRC yes/no, CRC type and port number may be configured for the port."

In regards to **modifying software on the gaming machine**, on page 19 of the specification, last paragraph, it states, "Thus, since the communication multiplexer device described in this invention provides additional communication capabilities to the gaming machine without modifying regulated gaming software on the gaming machine, an advantage of using the communication multiplexer device to provide communication functions may be reduced costs associated with re-approval of software on the gaming machine."

In regards to **application specific protocols**, on page 13 of the specification, last paragraph it states, 'Application specific protocols, as described above, that are programmed in

gaming software residing on the gaming machine 2 and utilized for communications by the gaming machine 2 are referred to as "native communication protocols."

In regards to **physical communication connections, physical communication protocols, application specific protocols** and their relation, on page 12 of the specification, it states, "A number of characteristics may be associated with each game service network interface 302 including: 1) a physical interface with a physical communication protocol and 2) an application communication protocol. The physical interface may include parameters such as the cable type, type of pin connectors, signal voltage levels and baud rate while the physical communication protocol may include parameters such as number of stop bits, number of start bits, parity and bits per byte. Asynchronous serial and synchronous serial are common physical communication protocols that may be used with a particular physical interface. Typically, the application protocol is a higher level protocol than the physical communication protocol and is carried over the physical interface using the physical communication protocol. Thus, for instance, a message from the accounting server 310 requesting meter information on the gaming machine, such as "coin in", may be translated into a format consistent with the physical communication protocol and physical interface and transmitted to the gaming machine 2."

In regards to **formatting in the second communication protocol and mapping**, the specification on page 15 states, The communication multiplexer device 304 may multiplex and convert all the messages received at each communication port to a second communication protocol such that the messages from each communication port may be sent via a network interface 318 connected to an output communication port on the communication multiplexer device 304. Messages to all of the game service servers from the gaming machine, including 310, 312, 314, and 316, may be transmitted via the output communication port. For instance, when the communication multiplexer device 304 uses a TCP/IP communication protocol as the second communication protocol, messages received at each communication port may be encapsulated, addressed and sent to the game service server associated with each communication port using the output communication port. The encapsulation, addressing and sending of messages is performed with processor logic stored on the communication multiplexer device. When the communication multiplexer device 304 is initialized with the TCP/IP communication protocol, each communication port may be mapped to a particular gaming service server which allows the communication multiplexer device to route messages received at each communication port to a particular game service server. The initialization process is described with reference to FIG. 6.

In regards to **translating between different application specific protocols**, the specification page 16 first paragraph states, "In another embodiment, the communication

multiplexer device may provide translation functions between a gaming machine 2 with a native communication protocol different from the communication protocol used by the game service server. For example, on gaming machine 2, the native communication protocol for accounting game services may be SDS while the accounting game server 310 may use SAS. Thus, when the communication multiplexer device 304 receives a message from the gaming machine 2 at one of the communication ports for the accounting server 310, the communication multiplexer device may convert it from SDS to SAS and then to another format such as TCP/IP (as described above) for transmission to the accounting server 310. Further, when messages are received from the accounting server in SAS, the communication multiplexer device 304 may convert messages from SAS to SDS before transmitting the messages to the gaming machine." Applicant notes that SDS and SAS are two types of player tracking protocols.

Rejections under 35 U.S.C. § 102

The Examiner rejected claims 1-8, 10, 12-14, 16-17 and 21-28 are rejected under 35 U.S.C. 102 (b) as being anticipated by Acres et al. (U.S. Patent No. 5, 741, 183). The rejection is respectfully traversed.

Claims 17-30 and 41-43 as amended describe a communications multiplexer device comprising a logic device for multiplexing communications between a master gaming controller on a gaming machine and one or more game service servers. The logic device does not communicate with the master gaming controller on the gaming machine. Further, the logic device adapted for: i) determining a destination device for each message received at one of the plurality of communication ports wherein each message is formatted using a particular application specific protocol, formatting each message in the particular application specific protocol into the second communication protocol and transmitting a message formatted in the second communication protocol via the output communication port to the destination device wherein the message formatted in the second communication protocol includes information originally formatted in the particular application specific protocol; ii) determining a destination port from among the plurality of communication ports for each message received at the output communication port wherein each message received at the output communication port is formatted using the second communication protocol, formatting the message received in the second communication protocol into the particular application specific communication protocol that is compatible with the destination port and transmitting the message in the particular application specific protocol via the destination port. In Acres, the logic device in the player tracking unit clearly communicates with the master gaming controller on the gaming machine. For instance, the logic device on the player tracking unit communicates with the master gaming controller during the initialization process and to collect metering data from the gaming machine.

In addition, Acres does not describe a logic device that is adapted for formatting a plurality of different application specific protocols into a common communication protocol or directing messages between a single output communication port and a plurality of communication ports. Acres does not describe a memory device for storing a mapping that allows messages to be directed by the logic device. For at least these reasons, Acres cannot be said to anticipate claims 17-30 and 41-43 and the rejection is believed overcome thereby.

Rejections under 35 U.S.C. § 103

The Examiner rejected claims 9 and 20 under 35 U.S.C. 103 (a) as being unpatentable over Acres in view of Alcorn et al (U.S. patent No. 6,149, 522). The rejection is respectfully traversed.

The Examiner rejected claims 15, 18-19, 29 and 30 under 35 U.S.C. 103(a) as being unpatentable over Acres (5,741,183).

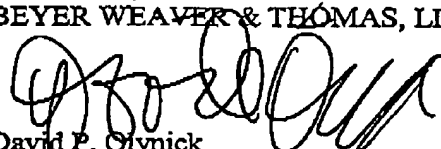
The Examiner rejected claims 11 and 31-40 under as being unpatentable over Acres in view of O'Toole (U.S. Patent 6,345, 294).

All of the instant claims as amended, 17-30 and 41-43 describe a communication multiplexer device with a plurality of communication ports, an output communication port and a logic device. The communication multiplexer device is connected to a master gaming controller on a gaming machine and one or more game service servers and receives communications from both the one or more game servers and the master gaming controller via the plurality of communication ports and the output communication port. The communication multiplexer device controls communications between the plurality of communication ports and the output communication port. Further, the logic device on the communication multiplexer device does not communicate with the master gaming controller on the gaming machine. The structure and function described in the limitations of claims 17-30 and 41-43 are not described in the combination of references or individual references cited by the examiner.

The Examiner relies on Alcorn for methods relating to casino security and O'toole for methods relating to a boot server. Thus, the combinations of Alcorn and Acres or O'toole do not remedy the deficiencies in Acres in regards to the formatting of communication protocols and message processing described above. Therefore, for at least these reasons, Acres, Alcorn and O'toole, alone or in combination, can't be said to render obvious claims 17-30 and 41-43 and the rejection is believed overcome thereby.

Applicant believes that all pending claims are allowable and respectfully requests a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,
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